

Streetcar Right-of-Way Manual

City of Cincinnati

February 29, 2016

Contents

I. DEFINITIONS.....	5
FIGURE 1 – VEHICLE AND POWER ENVELOPE.....	9
II. APPLICABILITY.....	10
III. TRACK ACCESS ACTIVITY CATEGORIES.....	10
IV. TRACK ACCESS AUTHORIZATION PROCEDURE.....	16
FIGURE 2 – TRACK ACCESS APPLICATION FORM.....	19
V. TRACK ACCESS SAFETY PROCEDURES	20
VI. SPECIAL PROCEDURES FOR ADJACENT WORK PROVIDERS	21
VII. TRACK ACCESS TRAINING	22
VIII. INDEMNIFICATION	22
IX. FINES AND PENALTIES	22

PREFACE

This document implements regulations and operational standards regarding activities conducted under a permit, franchise agreement or special agreement along the alignment of the Cincinnati Streetcar System (“Streetcar”) and the public right-of-way of the City of Cincinnati (“City”).

By constructing street improvements to facilitate the implementation of the Cincinnati Streetcar, the City seeks to support the efficient and safe multi-modal transportation uses of its streets. The shared use of such streets by automobile, pedestrian, bicycle, and public transit modes (e.g., publicly operated buses and streetcars), however, requires constant oversight and management to avoid conflicts with non-transportation street activities (e.g., street openings and street encroachments).

As a home-rule municipal corporation, the City has exclusive authority under Ohio and local law over the regulation and control of public right-of-way within the City, including, but not limited to, streets, avenues, alleys, and sidewalks. Due to the City's essential interest in safe and efficient use of its rights of way, non-transportation activities located in the right-of-way currently require authorization from the City – typically in the form of a permit. As a condition of such permits, applicants must comply with all City regulations and the Cincinnati Municipal Code, including the Right of Way Permits and Street Restoration Manual. This Appendix describes additional right-of-way permit conditions for activities that potentially conflict with the maintenance of the City's streetcar-related street improvements and with the operation of the Cincinnati Streetcar.

The City has executed an intergovernmental agreement with the Southwest Ohio Regional Transit Authority (SORTA) for the operation of the Cincinnati Streetcar system and to provide for coordination of transportation and non-transportation activities in the public right-of-way along the Cincinnati Streetcar right-of-way alignment. The City has agreed to require that any City permit application issued for activities in the right of way along the streetcar alignment shall contain a Track Access Authorization Application Form.

The processes outlined herein are intended as life-safety standards and procedures critical for management of streets that contain streetcar trackway. It is imperative that all parties comply with these standards to ensure the safety and well-being of the Permittee’s staff, contractors, utility employees, the travelling public, and streetcar operating personnel. Compliance requires diligence of all parties and is of mutual interest in promoting safe performance of work in the right-of-way with minimal disruption to the use of City streets and sidewalks.

Copies of this manual are also available online at the DOTE website.

For additional information, please contact:

Southwest Ohio Regional Transit Authority
Department of Rail Services

602 Main Street, Suite 1100
Cincinnati, OH 45202-2549
Telephone (513) 632-7561

I. DEFINITIONS

Unless otherwise defined below, all terms used in this Streetcar Right-of-Way Manual shall have the same meaning as set out in the provisions of the City of Cincinnati Department of Transportation and Engineering / Division of Engineering Right-of-Way Permits and Street Restoration Manual.

- A. **Construction** means any of the following activities performed by any person within a public right-of-way:
 - 1. Installation, excavation, laying, placement, repair, upgrade, maintenance, inspection, or relocation of facilities or other improvements, whether temporary or permanent;
 - 2. Modification or alteration to any surface, subsurface or aerial space within the public right-of-way;
 - 3. Performance, restoration, or repair of pavement cuts or excavations;
 - 4. Reconstruction of any of the work described in Paragraphs (A)(1) through (A)(3) of this subsection; or
 - 5. Other similar construction work.
- B. **Day** means each day shown on the calendar.
- C. **DOT** means City of Cincinnati Department of Transportation and Engineering
- D. **Emergency Activity** has the meaning set forth in Section III.3 of this Streetcar Right-of-Way Manual.
- E. **Franchisee** means a utility business entity that has entered into a franchise agreement with the City for the operation of its utility facilities within the City's public right-of-way.
- F. **Headways** means a measurement of the distance/time between transit vehicles. A shorter headway signifies a more frequent service. Headway is measured as the distance from the tip of one vehicle to the tip of the next one behind it, expressed as the time it will take for the trailing vehicle to cover that distance. This time is expressed in minutes.
- G. **Non-Revenue Service Hours** means all hours except for revenue service hours and the thirty (30) minutes prior to the first revenue service hour of the day.
- H. **Normal Transportation Purpose** means ordinary use of the public right-of-way for travel by the public including by pedestrians, vehicles, and bicyclists. Encroachment or obstruction of the Vehicle and Power Envelope for commercial activities is not a normal transportation purpose for purposes of this Streetcar Right-of-Way Manual.
- I. **OMUTCD** (*Ohio Manual on Uniform Traffic Control Devices*) means The the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) establishes statewide standards

for the design and use of traffic control devices on any street, highway, bikeway or private road open to public travel in Ohio, as well as private roads open to public travel.

- J. **Operator** or **SORTA** means the Southwest Ohio Regional Transit Authority (SORTA), who is responsible for operating and maintaining the Streetcar pursuant to an operations and maintenance agreement with the City.
- K. **Operating Restrictions** means a deviation from normal streetcar operations as a result Permittee activity that actually or potentially encroaches on or obstructs the Vehicle and Power Envelope.
- L. **Overhead Contact System (OCS)** means the system of wires, poles and underground feeders that distributes 750 VDC (nominal) traction power to the streetcar vehicles from the substations. The contact wire which hangs above the track is a continuously energized, un-insulated solid copper wire suspended by span wires or bracket arms which is contacted by the pantograph or trolley pole on the vehicle.
- M. **Permittee** means a person requiring a Track Access Authorization for an activity within the Streetcar Right-Of-Way (ROW) Alignment as a condition of a valid City permit for such activity including, but not limited to, permits for construction activities and activities that encroach on or obstruct the public right-of-way. The definition of Permittee includes the following:
 - 1. Any officer, director, partner, manager, superintendent, or other authorized agent exercising control over or on behalf of the Permittee; and
 - 2. Any contractor or subcontractor of the Permittee, for purposes of compliance with this Streetcar Right-of-Way Manual.
- N. **Person** means any individual or any association, firm, partnership, joint venture, corporation or other legally recognized entity, whether for profit or not for profit. Person does not include the City or SORTA.
- O. **Police Officer** means State of Ohio certified sworn officer including, but not limited to City of Cincinnati Police officer and Hamilton County Sheriff officer.
- P. **Power Down** means the disconnection of traction electrical power (TEP) to the entire Streetcar system or any segment thereof and/or the vehicle maintenance facility by the Streetcar operator.
- Q. **Public Right-of-Way (ROW)** means generally property, whether or not in the form of a strip, for or devoted to (a) public transportation purposes; or (b) the placement of the City's utility easements and other traditional uses along a transportation route, whether by dedication, prescription or otherwise, as well as the spaces above and below. In addition to the foregoing, the definition of Public Right-of-Way includes, without limitation, public highways, streets, avenues, alleys, sidewalks, public grounds, bridges, public grounds, aqueducts, and viaducts within the City.

- R. **Regulations** means all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, standards, executive orders, consent orders, and guidance from regulatory agencies, judicial decrees, permits, licenses or other governmental requirements of any kind.
- S. **Revenue service hours** means:
1. Monday through Friday between the hours of 5:30 am and 11:00 pm
 2. Saturdays between the hours of 8:30 am and 11:00 pm
 3. Sundays between the hours of 9:00 am and 10:30 pm
- Revenue service hours are subject to change by the City and/or SORTA at any time.
- T. **Routine Activity** shall have the meaning set forth in Section III, subsection 1, of this Streetcar Right-of-Way Manual.
- U. **Street Restoration Manual** means The current version of the City of Cincinnati, Department of Transportation and Engineering/Division of Engineering Right of Way Permits and Street Restoration Manual.
- V. **Streetcar ROW Alignment** means the public right-of-way contiguous with the streetcar trackway, including the area from property line to property line, which may include a roadway, sidewalk, curb, grassy area, utilities facilities, all or any combination of the above.
- W. **Street** means every public way set apart for travel, by whatever word designated, including the area from property line to property line, which may include a roadway, sidewalk, curb, grassy area, utilities facilities, all or any combination of the above.
- X. **Streetcar Personnel** means the body of persons employed and authorized by the City or SORTA to work for or on the Streetcar.
- Y. **Track Access Authorization** means the authorization required as a condition of City permits to work within the Streetcar ROW Alignment, including but not limited to work within the Streetcar Vehicle and Power Envelope.
- Z. **Track Access Card** means credentials issued to an individual upon successful completion of SORTA-certified streetcar track access safety training. Track Access Cards are specific to an individual, include an expiration date after which certification is no longer valid, and are not transferable. SORTA may revoke Track Access Card credentials and an associated Track Access Authorization for any safety specific reason, or if an individual shares, forges, or otherwise misuses a Track Access Card. Track Access Cards are mandatory for any person working for a Permittee pursuant to a Track Access Authorization and are subject to inspection by SORTA prior to issuance of a Track Access Authorization and at any time during work associated with a Track Access Authorization within the Vehicle and Power Envelope. Track Access Cards must be

visibly displayed/worn by and persons working within the Vehicle and Power Envelope pursuant to a Track Access Authorization.

AA. **Trackway** means the area immediately surrounding the rails on which the streetcars run including the track slab. These lanes are typically shared with vehicular traffic.

BB. **Vehicle and Power Envelope** means the horizontal and vertical boundaries specifying the surrounding borders of the Streetcar track system, encompassing the overhead power contact wire, the sides and underground excavation depth under the vehicle. This envelope includes the trackway and sidewalk, along with any areas within 5-feet 6-inches (5'6") of equipment and the safe margin of the Streetcar system as illustrated in the Vehicle and Power Envelope Diagram (Figure 1 to this Streetcar Right-of-Way Manual).

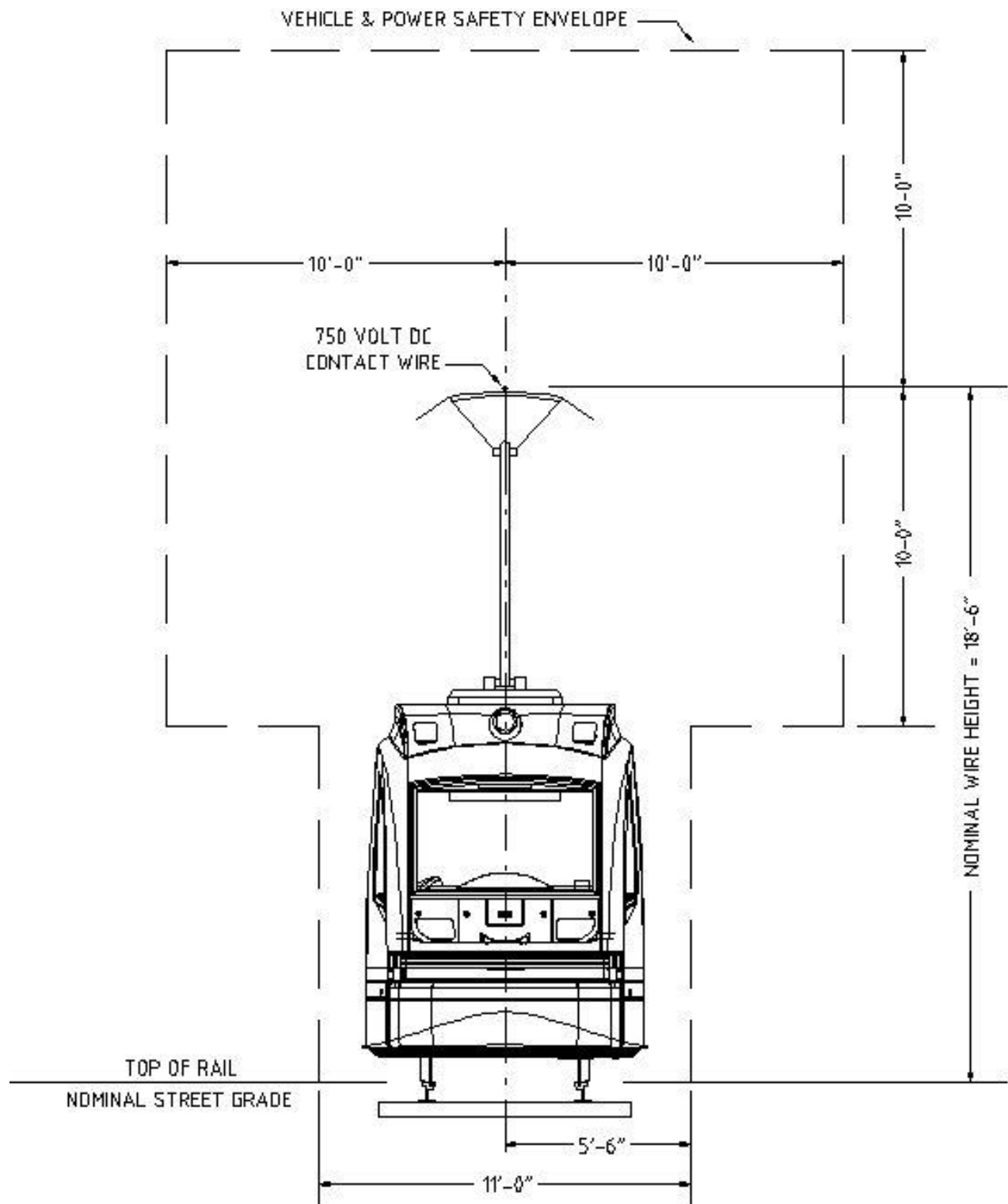


Figure 1 - Vehicle and Power Envelope

II. APPLICABILITY

Any activity by a Permittee undertaken with potential to obstruct or encroach on the Streetcar ROW Alignment other than for a Normal Transportation Purpose shall require a valid Track Access Authorization obtained in accordance with the procedures set forth in this Streetcar Right-of-Way Manual. This manual applies to all streetcar systems, Franchisees, and other Permittees operating within the Streetcar ROW Alignment.

The following list of activities is a non-exclusive set of examples that illustrate types of activities that require a Track Access Authorization:

1. Construction, repair, or inspection activity in the public right-of-way along the streetcar alignment if the activity has the potential to obstruct or encroach on the Vehicle and Power Envelope.
2. Activities requiring a street opening permit and having the potential to encroach on the Vehicle and Power Envelope.
3. Activity by delivery service providers, film crews, parades, street festivals, and other forms of activity that potentially obstruct or encroach on the Vehicle and Power Envelope while conducting authorized and lawful business within the City.
4. Construction, repair, and inspection activity by utility companies if the activity has potential to obstruct or encroach upon the Vehicle and Power Envelope.
5. Any activity resulting in placement of barricades within the Vehicle and Power Envelope. (Construction companies and delivery service companies who have a need to barricade a public right-of-way, but who are not engaging in construction or repair in the public right-of-way, should also be familiar with traffic control regulations contained in the Ohio Manual on Uniform Traffic Control Devices (“OMUTCD”) and the Cincinnati Municipal Code, in addition to the requirements of this Streetcar Right-of-Way Manual.)

Irrespective of the activity type, it is important that the Permittee understand that streetcar services or special streetcar movements may occur at any time of day or night for any purpose – in either direction along the trackway – except when the City or streetcar operator has instituted a streetcar operating restriction in conjunction with a valid Track Access Authorization. Headway between streetcars will be a minimum of 10-minute intervals through all Revenue Service Hours. As a general rule, Streetcar operations will be less frequent during Non-Revenue Service Hours than during Revenue Service Hours (see defined terms in Section I, above).

For safety reasons, Permittee personnel should always assume that Streetcar operations could occur at any time.

III. TRACK ACCESS ACTIVITY CATEGORIES

Track Access Authorization procedures vary depending on whether an activity qualifies as Routine Activity, Major Activity, or Emergency Activity. For purposes of this Streetcar Right-of-Way Manual, an activity qualifies as routine, major, or emergency according to the general factors summarized in **Table 1**, below.

TABLE 1 – Categories of Track Access Authorization

	Planned / Reasonably Foreseeable	Power Down or Operating Restrictions	Duration
Routine – Class 1	Activity is reasonably foreseeable; ordinarily planned in advance.	No.	No restrictions on duration; okay for Non-Revenue or Revenue Service Hours.
Routine – Class 2	Activity is reasonably foreseeable; ordinarily planned in advance.	Yes.	Activity can reasonably be completed during Non-Revenue Service Hours, including multiple nights if needed; required to be performed during Non-Revenue Service Hours unless exceptions apply.
Major	Activity is reasonably foreseeable; ordinarily planned in advance.	Yes.	All or portion of activity must be performed during Revenue Service Hours; activity cannot reasonably be performed during Non-Revenue Service Hours.
Emergency	Activity meeting the definition of emergency in Section III.3.	Varies case-by-case.	Varies case-by-case.

The Streetcar Rail Services Manager or his/her representative shall determine whether to grant or deny each Track Access Authorization and the conditions upon which the authorization may be granted, but access shall not be unreasonably denied or withheld. In the event of a conflict between City permit conditions and a Track Access Authorization, the City permit shall control.

1. Routine Activity

For purposes of this Streetcar Right-of-Way Manual, routine activity generally consists of activity that can be done without requiring Power Down or Operating Restrictions during Revenue Service Hours. Class 1 Routine Activity consists of planned activity by a Permittee in the Streetcar ROW Alignment that does not require Operating Restrictions or Power Down; Class 2 Routine Activity requires Operating Restrictions or Power Down. 1. SORTA may grant a programmatic Track Access Authorization to Permittees for multiple instances of related work activity or for a category of related Routine Activities during a fixed period of time.

A. Class 1 Routine Activity means activity by an authorized Permittee within the Streetcar ROW Alignment that Operator determines does not require Operating Restrictions or Power Down. Operator may grant Permittee Track Access Authorization for Class 1 Routine Activity for access during all hours subject to the following requirements:

1. Track Access Authorization is required.
2. Track Access Authorization is subject to the general provisions of this Streetcar Right-of-Way Manual.
3. Advance notice must be given to the City and Operator.
4. Safety procedures used during these hours shall be described in the Track Access Authorization, and shall include all OMUTCD and City of Cincinnati requirements, including, but not limited to, the City of Cincinnati Street Restoration Book, the City of Cincinnati Street Traffic Safety Handbook, any provisions normally employed by the Permittee for working in the public right-of-way, any applicable Routine Safety Procedures, and any additional safety procedures agreed to between the City and Permittee. Refer to Track Access Safety Procedures: Conditions of Work During Streetcar Operations, Article IV.

B. Class 2 Routine Activity means routine activity by an authorized Permittee within the Streetcar ROW Alignment that Operator determines may require Operating Restrictions or Power Down but can ordinarily be performed during Non-Revenue Service Hours. Track Access Authorization for Class 2 Routine Activity is subject to the following requirements in addition to the above requirements applicable to Class 1 Routine Activity:

1. Track Access Authorization for Class 2 Routine Activity is limited to activity during Non-Revenue Service Hours unless an exception applies as provided in Section III.1.B.6, below.
2. Class 2 Routine Activity must be complete at least 30 minutes prior to start of Revenue Service Hours.
3. If a Power Down is required, Track Access Authorization shall be conditioned on the requirement that power be restored at least 30 minutes prior to the beginning of Revenue Service Hours.

4. Class 2 Routine Activity may be performed during Non-Revenue Service Hours over the course of multiple days.
5. Permittee must be aware that although normal passenger service is not taking place during Non-Revenue Service Hours, streetcars may still be operating (i.e., deadheading, testing and/or inspection of the streetcars, tracks and/or overhead power systems).
6. Exceptions to Non-Revenue Service Hour limitation. The Operator may grant exceptions for performance of Class 2 Routine Activity during Revenue Service Hours if: (a) activity during Revenue Service Hours is reasonably necessary under the circumstances; and (b) the activity can be performed without undue disruption to streetcar operations. An activity will not constitute an undue disruption on streetcar activity if:
 - (i) No Power Down is required during Revenue Service Hours; and
 - (ii) Operating restrictions solely address encroachment of the activity into the vehicle envelope (as opposed to the power envelope) and either: (1) the Permittee can clear the encroaching activity from the vehicle envelope without interfering with the operation of the streetcar vehicle; or (2) the activity does not physically block the path of the vehicle and the vehicle can proceed through the work area with assistance from a flagger and/or supervisor.
7. If an exception is not warranted, then the activity will require authorization as a Major Activity.

2. **Major Activity**

The City and Operator recognize that, periodically, Permittee may need to perform maintenance activities that require Operating Restrictions for several hours or days during Revenue Service Hours. During such events, a partial curtailment of the streetcar operations may be required. Such events shall be planned in advance between the Permittee, the City, and SORTA. A determination of the operating schedule of the streetcar in any given line segment affected by a curtailment will be made on a case by case basis as part of the Track Access Authorization process.

A. Major Activity means non-emergency activity that requires Operating Restrictions and does not qualify as Class 1 or Class 2 Routine Activity. Major Activity consists of planned work that requires Operating Restrictions and/or Power Down and, by definition, disrupts streetcar operations. Track Access Authorization for Major Activity is subject to the following requirements:

1. Track Access Authorization is required.
2. Track Access Authorization is subject to the general provisions of this Streetcar Right-of-Way Manual.

3. Advance notice must be given to the City and Operator.
4. Safety procedures used during these hours shall be described in the Track Access Authorization, and shall include all OMUTCD and City of Cincinnati requirements, including, but not limited to, the City of Cincinnati Street Restoration Book, the City of Cincinnati Street Traffic Safety Handbook, any provisions normally employed by the Permittee for working in the public right-of-way, any applicable Routine Safety Procedures, and any additional safety procedures agreed to between the City and Permittee.
5. Special precautions may be required for in-street work during Revenue Service Hours. Refer to Track Access Safety Procedures: Conditions of Work During Streetcar Operations, Article IV.
6. Permittee shall work with the City and Operator to ensure that (1) Streetcar disruption is minimized, and (2) any required reductions in Streetcar service are implemented in a safe and orderly fashion.
7. To the extent feasible, Major Activities shall be performed during Non-Revenue Service Hours in order to minimize impacts to streetcar operations.

3. Emergency Activity

Permittee Emergency Activity means activity by a Permittee in the Streetcar ROW Alignment is immediately necessary to: (1) prevent damage or injury to the health or safety of any person; (2) restore utility service; (3) prevent the imminent loss of utility service; or (4) protect property, the environment, or the right-of-way from imminent and substantial harm. Reasonably foreseeable work in the public right-of-way shall not qualify as Emergency Activity. Emergency Activity shall require Track Access Authorization, except that a Track Access Authorization may be issued retroactively.

Emergency Activity shall be subject to the following requirements:

- A. Permittee shall notify the City and Operator immediately (as soon as practicable) upon learning of conditions requiring Emergency Activity in the Vehicle and Power Envelope. The Permittee shall strive to notify the City and the Operator at least four hours prior to commencement of work and shall provide a minimum of no less than one hour advance notice; the period of advance notification shall not be less than the time taken by the Permittee to route personnel and equipment to the affected area.
- B. Operator will immediately assign one of its supervisors to work with the Permittee to determine if streetcar operations may continue during the Emergency Activity under an Operating Restriction or if the system must be halted or services truncated.
- C. Permittee shall work with the City and Operator to ensure that (1) streetcar disruption is minimized, and (2) any required reductions in streetcar service are implemented in a safe and orderly fashion.
- D. If a system halt or truncation is necessary, the assigned SORTA supervisor shall coordinate the location of all streetcars prior to a Power Down in the impacted area, including the following:

1. The assigned Streetcar supervisor will coordinate with Streetcar Control to immediately direct that all streetcars shall be held at the next station or implement a truncated operating plan.
 2. The assigned supervisor shall execute the Power Down for the affected OCS section(s).
 3. Streetcar Power Down cannot strand streetcars and passengers between stations. All cars must be safely berthed at a station-stop.
 4. If outage duration warrants, SORTA will arrange for special bus services as an alternative to the Streetcar, to maintain service for riders in the affected area.
- E. If a system halt or truncation is not necessary, the Permittee shall coordinate the work with the assigned SORTA supervisor to execute the required repairs in a safe, timely and efficient manner.
- F. Permittee will keep the assigned SORTA supervisor informed of the progress of the work at all times.
- G. Following an emergency declaration, Permittee shall attend a mandatory after-action meeting be held within five business days of the resolution of the Emergency Activity to review the declaration and to document the basis for the emergency declaration. Permittee and SORTA staff must attend this meeting and consider any recommendations for improvement of emergency operations.
- H. Permittee must provide evidence that the activity meets the definition of Emergency Activity as defined in Section I.C above. Activity that was reasonably foreseeable and/or planned is not Emergency Activity.
- I. If the City determines that conditions did not warrant Emergency Activity, penalties may apply under the Cincinnati Municipal Code.

IV. TRACK ACCESS AUTHORIZATION PROCEDURE

1. **Review Authority.** SORTA will issue all Track Access Authorizations. Due to the significant life-safety issues presented by work in the Vehicle and Power Envelope, the Railway Manager shall have sole discretion to issue or deny Track Access Authorizations. Permittee activity in the Streetcar ROW Alignment cannot commence in the absence of a signed and completed Track Access Authorization.
2. **Permit Application and Issuance Procedure.** Permits are processed using the following procedures:
 - A. Track Access Authorization requests shall be made using a Track Access Application Form obtained from the DOTE website. A sample version of this document is shown at the end of this section. This application form shall be attached to all DOTE Right of Way Permit Applications. DOTE will forward the Track Access Application Form to SORTA
 - B. All requests for planned work within the Streetcar ROW Alignment will be reviewed at a weekly track access planning meeting, held each Wednesday, at the Streetcar Maintenance and Operations Facility (“MOF”), unless alternative Track Access Authorization review arrangements have been approved in advance by the City and Operator. Neither the City nor SORTA shall agree to arrangements that result in competitively unfair access to the Streetcar ROW Alignment.
 - C. Operator may grant a programmatic Track Access Authorization to a Permittee covering (a) multiple instances of related Routine Activities over a fixed period of time or (b) a category of Routine Activities.
 - D. Track Access Authorization requests will be discussed at the meeting, with final determination made no later than the Friday immediately following the meeting. Requests can be made simultaneously with any other required City of Cincinnati permit application(s).
 - E. If approved for a Track Access Authorization the completed/signed Track Access Authorization will be returned to the Permittee along with the approved DOTE right-of-way permit.
 - F. Only the Permittee’s job supervisor (who will supervise the work under the Track Access Authorization authorization) may sign for and receive the Track Access Authorization. The SORTA MOF manager will verify that the Permittee has made all proper preparations for the work, and that all personnel have a current and valid Track Access Card.
 - G. Note that a Track Access Authorization must be signed by signature of SORTA to be valid. The earliest that Track Access Authorizations will be available is after 8:15 am on the immediate Monday following the planning meeting, unless prior arrangements have been made.
3. **Extended Activity.** Any work of an extended nature (i.e., Major Activity) will require advance long-term planning with the City and SORTA.
4. **SORTA Contact Number and Training**

- A. SORTA shall provide all parties a telephone call number for 24-hour immediate access to the supervisor on duty at the Streetcar operations center.
 - B. SORTA shall provide track access training to all Permittees and their agents for the required authorizations within this Streetcar Right-of-Way Manual.
 - C. The City and the Operator shall make provisions for required training and authorizations, at Permittee's expense. Operator shall not charge Permittee for training costs.
5. Pre-Conditions for Work while Streetcars are in Operation. Activity will be allowed within the Vehicle and Power Envelope during Streetcar operations, under the following conditions:
- A. A Track Access Authorization has been issued for the work.
 - B. Prior to commencement of the work, SORTA shall review the flagging and safety rules with the Permittee supervisor. A designated safety area for personnel will be established for Streetcar passage during the work period.
 - C. Brief stoppage of the streetcar to clear personnel will be allowed.
 - D. SORTA shall issue an "Operating Restriction Order" (requiring streetcars to proceed at slow speed through affected area) to all streetcars on the alignment during the work of the Permittee.
 - E. The on-site SORTA supervisor, if applicable, shall alert the Permittee of the approaching streetcar and make visual contact with each train operator as they approach the work area. Once contact is confirmed between the SORTA supervisor and the operator of the streetcar, the streetcar shall hold until the SORTA supervisor has determined that the Permittee, its tools and equipment are safely located.
 - F. When streetcars are running under an Operating Restriction Order, SORTA will hold an in-field review of the procedures with both the Permittee and the SORTA supervisor. Dependent upon site specific conditions, SORTA may designate the Permittee with authority to walk the train through the work area.
 - G. When the work has been completed, the Permittee will close out the Track Access Authorization with the signature of the designated SORTA streetcar supervisor on duty. The Permittee must vacate the work site and cease all work under the former Track Access Authorization.
 - H. The Operating Restriction Order shall not be released until SORTA has determined that the Permittee has completed the work, removed all tools and vehicles, and left the track alignment.
6. Permittee Requirements
- A. All supervisory level personnel working within the Vehicle and Power Envelope shall have had track access training as required by SORTA and the City. The Permittee will pay all costs for their personnel (labor and other expenses) to attend such training. SORTA will not charge for track access training.
 - B. All personnel, regardless of employer, entering the Vehicle and Power Envelope, shall have in their possession a current and valid Track Access Card. Track Access

Cards are obtained after attending a short duration Track Access Training safety course. See Safety Training below.

- C. At the beginning of each work shift involving track access, trained supervisors of the Permittee shall instruct all members of the work crew in the track access rules and safety procedures.
- D. In the event of two crews (i.e., a work crew within the street and a work crew in adjacent areas along the track (sidewalks or adjacent traffic lanes)), the Permittee shall have at least one crewmember, in addition to the supervisor, with the required track access training.
- E. When adjacent work is being performed, employees of the Permittee shall not enter or cross the Vehicle and Power Envelope to bring materials and supplies to their work area without the use of a traffic control personnel for flagging purposes.
- F. The Permittee supervisor on duty shall have the Track Access Authorization in his/her possession at all times during commission of the work being completed under the particular permit at the work location.
- G. When the Major Activity work has been completed, the Permittee will close out the Track Access Authorization with signature of the designated SORTA supervisor on duty, if applicable. The Permittee must vacate the work site and not return unannounced.



**CINCINNATI STREETCAR
TRANSDEV
WORKING WITHIN OR NEAR
THE STREETCAR TRACKWAY AND
POWER ENVELOPE**

Company Name _____

Exact Location of Work _____

Permit Number (City Use) _____

1. Is any permit work being applied for within the Figure 1- Streetcar Trackway and Power Envelope Attached to this form even if only for a moment? **(Yes / No) circle one.**

NOTE: If there are any questions about the process or permissible activities, permittee should contact Phil Lind 513-206-7825 or 513-206-7827 or Plind@go-metro.com

Answer yes to the above question if permit work within the envelope involves any construction activity, installation, excavation, lay down, placement, modification or alteration to any surface, subsurface, or aerial space. **PAY SPECIAL ATTENTION TO LOCATION OF DELIVERIES, DUMPSTERS AND LIFTS.**

If the answer to Question # 1 is yes go to Question # 2. If No, the form is complete.

2. If the answer to Question 1 is yes, will the only violation of the Figure-1 Streetcar Trackway and Power Envelope be temporary passing through for work described above (e.g. for deliveries) ? (Yes or No) circle one.

Please fill out the remainder of this form. You will need a Track Access Permit prior to start of work.

Description of Work (Permittee)

Equipment being used near overhead contact system (Permittee)

Contact person (Name, Phone # e-mail address) that will be responsible for work in the envelope

3. Return this form to DOTE/ROW Management Staff for processing with requested permit.
NOTE: NO WORK IS PERMITTED WITHIN 10' OF THE OVERHEAD CONTACT SYSTEM. THIS LINE IS ENERGIZED/ELECTRIFIED AT 750 VOLTS DC.

Signature of Person Requesting Permit: _____

FORM TAP 2-1-16 revised 2-9-16

Figure 2 - Track Access Application Form

V. TRACK ACCESS SAFETY PROCEDURES

1. Streetcar Power Down Process

- A. Except in the case of a Life Threatening Emergency (see below), traction power shall only be removed from the Streetcar system by Streetcar Control, in coordination with a Streetcar Supervisor. Critical Streetcar and passenger safety procedures must be implemented by SORTA prior to the Streetcar's Power Down.
- B. Should Permittee require a Power Down to perform work within the Power Envelope, a Track Access Authorization shall be required. *Power is not disconnected at the end of the revenue day and all elements of the Overhead Contact System are to be assumed energized at all times unless SORTA has de-energized the system.* Therefore, a Power Down during both revenue service and non-revenue service hours must be requested and permitted.
- C. A Power Down of the Streetcar overhead contact wire is accomplished through the SCADA (supervisory control and data acquisition) system at the SORTA Streetcar Control Center. The DC feeder breakers are remotely operated from the Control Center.
- D. A normal Power Down cannot be made by disconnecting the AC infeed power at the substation. Only SORTA can verify Power Down.
- E. Immediately after Power Down the SORTA "Safe-Out" Procedure shall be employed to ensure power is down. This will be communicated and coordinated with the Permittee.

2. Procedures Necessary During A Life Threatening Situation

- A. In the event of a life threatening emergency, first responders on the scene must immediately notify the Operator to Power Down the system and activate the SORTA emergency response program as outlined in the System Safety and Emergency Preparedness Plan (SSEPP).
- B. First responder organizations include law enforcement, fire, rescue and medical response units. All first responder organizations shall maintain staff on duty with training in Streetcar operations and track access safety. First responder organizations must also maintain staff trained in follow-up assistance procedures, to ensure the safety of streetcars, passengers and vehicular traffic is not jeopardized.
- C. It shall be recognized that unexpected halting of streetcars can result in adverse consequences in matters of both passenger safety and traffic management. A life threatening emergency does not include the following:
 - 1. Shutdown for the convenience of a Permittee (i.e., turning off power to maneuver a crane or other mobile equipment through the Vehicle and Power Envelope);
 - 2. Shutdown as a means of preventing a streetcar from traversing through an area under inspection for maintenance work, when proper Track Access Authorizations have not been obtained; or
 - 3. Shutdown for any form of rush order to establish or restore utility service to a utility customer.

- D. Nothing in this section is intended to dictate when a Permittee may be permitted access to its facilities for an Emergency Activity in the Streetcar ROW Alignment as provided in the Cincinnati Municipal Code or emergency repairs as provided elsewhere in the City Street Restoration Book. Such actions shall be subject to the requirements for “Emergency Activity” in III.3 above.
 - E. First responders shall notify potentially impacted utilities consistently with normal protocols.
- 3. **Banners and Signs.** No posting of banners and signs, or the running of ropes, wires or cables shall be made through or within the Vehicle and Power Envelope.
 - 4. **Cranes and Overhead Equipment.** Cranes and other mobile equipment not specifically insulated for overhead electric line work shall not be permitted to operate within the Vehicle and Power Envelope without Power Down.
 - 5. **Access to Traction Power Substations.** Only authorized Streetcar operating personnel shall enter Streetcar Traction Power Substations.

VI. SPECIAL PROCEDURES FOR ADJACENT WORK PROVIDERS

Certain routine services performed adjacent to the streetcar track in the Streetcar ROW Alignment may require cautionary training and regulation of work procedures and working times. Such work is typified by landscaping services, station-stop cleaning services and streetlight replacement services. Such work may also include activities outside of the Vehicle and Power Envelope, but immediately adjacent thereto. Track Access Authorizations and training for such work will be handled on a case-by-case basis in coordination between the City and SORTA.

Such Permittees will, at minimum, be required to have (1) an annually renewable Track Access Authorization, (2) Track Safety Training and (3) current and valid Track Access Cards.

SORTA will periodically audit the Permittee’s performance under the annual Adjacent Track Access Authorization. If the Permittee is found in violation of the permit requirements, SORTA or the City may revoke the annual permit. Permittees whose annual permit is revoked will need to apply for individual permits under the procedures described above.

VII. TRACK ACCESS TRAINING

SORTA will provide special safety training classes intended to train the supervisory personnel of all Permittees authorized to do work within the Streetcar ROW Alignment. Training and

materials provided will be suitable to allow the supervisory level personnel to train their respective workers. Track Access Safety goes beyond and is in addition to safety requirements for regular in-street work. This safety training and information provided is intended to supplement, not replace, existing safety programs in use by the utility companies and other service providers.

As a condition of work within the Streetcar ROW Alignment, all individuals must be able to demonstrate that they have attended Track Access Training courses at the proper level; individuals must carry a current and valid Track Access Card, issued upon completion of training.

Permittees must take necessary corrective action with personnel found to violate any Track Access rules and/or procedures. Any violations may be cause for SORTA revocation of Track Access Cards and/or Track Access Authorizations. Violations shall be subject to civil penalties under the Cincinnati Municipal Code.

VIII. INDEMNIFICATION

The Permittee, in accepting and by acting under a City permit for work in the Streetcar ROW Alignment, agrees to defend, indemnify, and hold harmless the City and its duly appointed agents and employees to the fullest extent permitted by law from and against any and all claims, suits, liabilities, losses, damages, costs or expenses, including attorneys' fees, that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the negligence, recklessness, or willful misconduct of the Permittee in the exercise of this permit.

Nothing in this Street ROW Manual shall limit the application of bonding, insurance, or any other permit requirements imposed under applicable Regulations.

IX. FINES AND PENALTIES

Failure to comply with the requirements of this Streetcar Right-of-Way Manual may result in revocation of City permits, revocation of street contractor licenses, levying of administrative fines, and other penalties as provided for in the Cincinnati Municipal Code.